

Applicants : Dean P. Macri, et al.
Serial No. : 09/539,343
Filed : March 31, 2000
Page : 9 of 13

Attorney's Docket No.: 10559-154001
Intel Docket No.: P7988

REMARKS

Claims 1, 3, 5-6, 8-11, 13, 15, 17-20, 22, 24, 26-27 and 29-30 are pending in the application, of which claims 1, 9, 11, 18, 20, 27 and 29 are independent. Favorable reconsideration and further examination are respectfully requested.

Claims 1, 3, 5-6, 8-11, 13, 15, 17-20, 22, 24, 26-27 and 29-30 were rejected under 35 U.S.C. § 103 over U.S. Patent No. 5,299,302 (Fiasconaro) in view of Pedersen, "A Framework for Interactive Texturing on Curved Surfaces" (hereinafter "the Pedersen reference"). Applicants respectfully traverse this rejection.

Independent claim 1 defines a method of trimming a parametric surface. The method includes producing a trimming texture, which comprises a texture map image representation of a trimming curve for the parametric surface. The trimming texture is applied by texture mapping the trimming texture onto the parametric surface to produce trimmed and untrimmed portions. Only the untrimmed portion is rendered.

The applied art is not understood to disclose or suggest the foregoing features of claim 1. In fact, Examiner acknowledges, on page 3 of the Office Action, that

Fiasconaro fails to disclose applying the trimming texture to the parametric surface, the trimming texture being applied by texture mapping the trimming texture onto the parametric surface to produce trimmed and untrimmed portions; and rendering only the untrimmed portion.

Examiner argues that the Pedersen reference supplies the missing features. Applicants respectfully disagree.

The Pedersen reference is directed to a conventional method of texture mapping, which includes applying a curve to a first surface, copying a region of texture from the first surface (called a “patchino”), and applying the patchino to a second surface. The second surface is combined (and presumably rendered) with the patchino. Specifically, the Pedersen reference states the following on page 300, section 4.2:

In our system, any number of texture patches can exist on the surface at any time, and the user is free to translate, rotate, scale and deform these by clicking on them. *Motivated by the image compositing paradigm*, the patches reside on different layers and can be lowered or raised similar to the way windows can be manipulated on graphically oriented systems (emphasis added).

The patchinos in the Pedersen reference are not used for trimming, but rather for creating composite images, as described in section 4.2 of the Pedersen reference. Thus, the Pedersen reference does not teach “applying the trimming texture to the parametric surface... *to produce trimmed and untrimmed portions,*” nor does Pedersen teach “rendering *only the untrimmed portion,*” as described in Applicants’ claim 1 (emphasis added). Pedersen expressly teaches away from trimming a parametric surface, and focuses instead on combining the surfaces for the purposes of “image compositing,” as described on page 295, section 1.

In this regard, page 3 of the Office Action alleges that Pedersen discloses “rendering only the untrimmed portion.” Applicants, however, find no support whatsoever for this allegation. As explained above, as understood by Applicants, the Pedersen reference shows creating composite images, i.e. rendering both portions of the image, not “only the untrimmed portion,” as described in Applicants’ claim 1.

For at least the foregoing reasons, Applicants respectfully submit that claim 1 is patentable over the combination of Fiasconaro and Pedersen.

Amended independent claim 11 is an article of manufacture claim that roughly corresponds to claim 1; and amended independent claim 20 is an apparatus claim that roughly corresponds to claim 1. These claims and the claims that depend from them are also believed to be patentable for at least the reasons set forth above with respect to claim 1.

Amended independent claim 9 defines a method of trimming a parametric surface, which includes producing a trimming texture, the trimming texture comprising a texture map image representation of a trimming curve for the parametric surface, mapping the trimming texture on the parametric surface to create a trimmed section and a rendered section, the trimming texture being mapped by texture mapping, and rendering only the rendered section of the parametric surface based on an application of the trimming texture to a plurality of polygons approximating the parametric surface.

As explained above with respect to claim 1, the Fiasconaro and Pedersen references, when taken alone or in combination, are not understood to disclose or to suggest applying the trimming texture to the parametric surface to produce trimmed and untrimmed portions, and rendering only the untrimmed portion. Accordingly, claim 9 is also believed to be patentable over the art.

Amended independent claim 18 is an article of manufacture claim that roughly corresponds to claim 9; and amended independent claim 27 is an apparatus claim that roughly

corresponds to claim 9. These claims are also believed to be patentable for at least the reasons set forth above with respect to claim 9.

Amended independent claim 29 defines a method for use in rendering images from data for an original three-dimensional model. The method includes obtaining a trimming texture that is a texture map image representation of a trimming curve for at least a portion of the three-dimensional model, applying the trimming texture to the three-dimensional model, the trimming texture being applied by texture mapping the trimming texture onto the three-dimensional model to produce trimmed and untrimmed portions, and rendering an image using only the untrimmed portion based on the three-dimensional model.

The Fiasconaro and Pedersen references, when taken alone or in combination, do not describe applying a trimming texture to a three-dimensional model by texture mapping the trimming texture onto the three-dimensional model to produce trimmed and untrimmed portions, and rendering only the untrimmed portion. Accordingly, claim 29 is believed to be patentable over the art.

Each of the dependent claims is also believed to define patentable features of the invention. Each dependent claim partakes of the novelty of its corresponding independent claim and, as such, has not been discussed specifically herein.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or

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Page : 13 of 13

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other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney can be reached at the address shown below. All telephone calls should be directed to the undersigned at 617-368-2158.

Please apply any fees or credits due in this case, which are not already covered by check, to Deposit Account 06-1050 referencing Attorney Docket No. 10559-154001.

Respectfully submitted,

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